ABSTRACT OF THE DISCLOSURE

An improved transistor array for a display or sensor device is described. The display or sensor device includes a plurality of pixels. Each pixel includes a width and a length. Each pixel is addressed by a transistor. The transistor addressing each pixel has a channel with a channel width. Each channel width is greater than the width or length of the pixel being addressed. By fabricating transistors with extremely long channel widths, lower mobility semiconductor materials can easily be used to fabricate the display device.